### Statewide (6/29/06 Revised Demand) 2006 Monthly Outlook

Res	ource Adequacy Planning Conventions	<u>June</u>	<u>July</u>	August	September
1	Existing Generation <sup>1</sup>	56,697	57,843	57,977	57,977
2	Retirements (Known)	-1,539	0	0	0
3	High Probability CA Additions	2,685	134	0	0
4	Net Interchange <sup>2</sup>	13,118	13,118	13,118	13,118
5	Total Net Generation (MW)	70,961	71,095	71,095	71,095
6	1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	56,320	58,885	59,498	58,583
7	Demand Response (DR)	524	524	524	524
8	Interruptible/Curtailable Programs	1,603	1,603	1,603	1,603
9	Planning Reserve <sup>4</sup>	29.8%	24.3%	23.1%	25.0%
Exp	ected Operating Conditions				
	Total Net Generation (MW)	70,961	71,095	71,095	71,095
10	Outages (Average forced + planned)	-2,695	-2,695	-2,695	-2,695
11	Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150
12	Expected Operating Generation with Outages/Limitations <sup>6</sup>	68,116	68,250	68,250	68,250
13	Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	26.7%	20.0%	18.5%	20.8%
Adv	erse Conditions				
14	High Zonal Transmission Limitation	-250	-250	-250	-250
15	High Forced Outages (1 STD above average)	-1,160	-1,160	-1,160	-1,160
16	Adverse Temperature Impact (1-in-10)	-3,128	-3,289	-3,591	-3,306
17	Adverse Scenario Reserve Margin <sup>7</sup>	15.3%	9.3%	7.4%	9.9%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	19.8%	13.6%	11.5%	14.2%
19	Resources needed to meet 7.0% Reserve (W/DR & Interruptibles)	0	0	0	0
20	Surplus Resources Above 7.0% Reserve (W/DR & Interruptibles)	6,072	3,289	2,310	3,594
21	Existing Aging Generation Without Capacity Contracts <sup>9</sup>	-3,088	-3,388	-3,388	-3,388

Dependable capacity by station includes 1,080 MW of stations located south of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: DC imports 2,000 MW, SW imports 4,100 MW, NW imports (COI) 4,000 MW, LADWP Control Area and IID imports 3,018 MW. Imports with own reserves highlighted in bold.

<sup>&</sup>lt;sup>3</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs because reserve margins are in excess of 5% (Stage 2).

Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 2.

<sup>&</sup>lt;sup>8</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental
 6/30/2006

## CA ISO (6/29/06 Revised Demand) 2006 Monthly Outlook

Res	ource Adequacy Planning Conventions	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
1	Existing Generation <sup>1</sup>	45,791	46,131	46,265	46,265
2	Retirements (Known)	-1,539	0	0	0
3	High Probability CA Additions	1,879	134	0	0
4	Net Interchange <sup>2</sup>	10,650	10,650	10,650	10,650
5	Total Net Generation (MW)	56,781	56,915	56,915	56,915
6	1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	45,453	47,413	47,564	47,139
7	Demand Response (DR)	524	524	524	524
8	Interruptible/Curtailable Programs	1,403	1,403	1,403	1,403
9	Planning Reserve <sup>4</sup>	29.2%	24.1%	23.7%	24.8%
Exp	ected Operating Conditions				
	Total Net Generation (MW)	56,781	56,915	56,915	56,915
10	Outages (Average forced + planned)	-2,255	-2,255	-2,255	-2,255
11	Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150
12	Expected Operating Generation with Outages/Limitations <sup>6</sup>	54,376	54,510	54,510	54,510
13	Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	24.1%	18.2%	17.7%	19.0%
Adv	erse Conditions				
14	High Zonal Transmission Limitation	-250	-250	-250	-250
15	High Forced Outages (1 STD above average)	-1,060	-1060	-1060	-1060
16	Adverse Temperature Impact (1-in-10)	-2,350	-2,468	-2,737	-2,486
17	Adverse Scenario Reserve Margin <sup>7</sup>	13.4%	8.0%	6.9%	8.7%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	18.2%	12.6%	11.5%	13.3%
19	Resources needed to meet 7.0% Reserve (W/DR & Interruptibles)	0	0	0	0
20	Surplus Resources Above 7.0% Reserve (W/DR & Interruptibles)	4,432	2,342	1,893	2,616
21	Existing Aging Generation Without Capacity Contracts <sup>9</sup>	-3,088	-3,088	-3,088	-3,088
1 0					

<sup>&</sup>lt;sup>1</sup> Dependable capacity by station includes 1,080 MW of stations located south of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: **DC imports 2,000 MW, SW imports 4,100 MW, NW imports (COI) 2,300 MW,** WAPA CVP 1,250 MW, LADWP Control Area imports 1,000 MW (Includes wheeled power). **Imports with own reserves highlighted in bold.** 

<sup>&</sup>lt;sup>3</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs because reserve margins are in excess of 5% (Stage 2).

Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 2.

<sup>&</sup>lt;sup>8</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental
 Concerns of Aging Power Plant Operations and Retirements

# CA ISO NP26 (6/29/06 Revised Demand) 2006 Monthly Outlook

Res	ource Adequacy Planning Conventions	June	July	August	September
1	Existing Generation	24,470	24,417	24,417	24,417
2	Retirements (Known)	-219	0	0	0
3	High Probability CA Additions	166	0	0	0
4	Net Interchange <sup>1</sup>	550	550	550	550
5	Total Net Generation (MW)	24,967	24,967	24,967	24,967
6	1-in-2 Summer Temperature Demand (Average) <sup>2</sup>	20,330	20,769	20,490	19,739
7	Demand Response (DR)	322	322	322	322
8	Interruptible/Curtailable Programs	316	316	316	316
9	Planning Reserve <sup>3</sup>	25.9%	23.3%	25.0%	29.7%
Exp	ected Operating Conditions				
	Total Net Generation (MW)	24,967	24,967	24,967	24,967
10	Outages (Average forced + planned)	-1,100	-1,100	-1,100	-1,100
11	Zonal Transmission Limitation <sup>4</sup>	0	0	0	0
12	Expected Operating Generation with Outages/Limitations <sup>5</sup>	23,867	23,867	23,867	23,867
13	Expected Operating Reserve Margin (1-in-2) <sup>6</sup>	17.9%	15.3%	16.9%	21.5%
Adv	erse Conditions				
14	High Zonal Transmission Limitation	0	0	0	0
15	High Forced Outages (1 STD above average)	-500	-500	-500	-500
16	Adverse Temperature Impact (1-in-10)	-633	-647	-638	-614
17	Adverse Scenario Reserve Margin <sup>6</sup>	11.8%	9.4%	10.9%	15.2%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>7</sup>	14.9%	12.4%	14.0%	18.4%
19	Resources needed to meet 7.0% Reserve (W/DR & Interruptibles)	0	0	0	0
20	Surplus Resources Above 7.0% Reserve (W/DR & Interruptibles)	1,613	1,129	1,437	2,265
21	Existing Aging Generation Without Capacity Contracts <sup>9</sup>	-1,018	-1,018	-1,018	-1,018

<sup>&</sup>lt;sup>1</sup> 2006 estimate of the following Net Imports: NW imports (COI) 2,300 MW + WAPA CVP Entitlements 1,250 MW - exports to SP26 3,000 MW.

<sup>&</sup>lt;sup>2</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings

<sup>&</sup>lt;sup>3</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>4</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>5</sup> Does not include Demand Response/Interruptible Programs because reserve margins are in excess of 5% (Stage 2).

<sup>&</sup>lt;sup>6</sup> Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 1.

<sup>&</sup>lt;sup>7</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 6.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental

Concerns of Aging Power Plant Operations and Retirements

### CA ISO SP26 (6/29/06 Revised Demand) 2006 Monthly Outlook

Res	ource Adequacy Planning Conventions	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
1	Existing Generation <sup>1</sup>	21,321	21,714	21,848	21,848
2	Retirements (Known)	-1,320	0	0	0
3	High Probability CA Additions	1,713	134	0	0
4	Net Interchange <sup>2</sup>	10,100	10,100	10,100	10,100
5	Total Net Generation (MW)	31,814	31,948	31,948	31,948
6	1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	25,663	27,208	27,640	27,960
7	Demand Response (DR)	202	202	202	202
8	Interruptible/Curtailable Programs	1,087	1,087	1,087	1,087
9	Planning Reserve <sup>4</sup>	29.0%	22.2%	20.2%	18.9%
Exp	ected Operating Conditions				
	Total Net Generation (MW)	31,814	31,948	31,948	31,948
10	Outages (Average forced + planned)	-1,155	-1,155	-1,155	-1,155
11	Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150
12	Expected Operating Generation with Outages/Limitations <sup>6</sup>	30,509	30,643	30,643	30,643
13	Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	24.8%	16.3%	13.9%	12.3%
Adv	erse Conditions				
14	High Zonal Transmission Limitation	-250	-250	-250	-250
15	High Forced Outages	-560	-560	-560	-560
16	Adverse Temperature Impact (1-in-10)	-1,745	-1,850	-1,879	-1,901
17	Adverse Scenario Reserve Margin <sup>7</sup>	10.8%	3.4%	1.3%	-0.1%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	16.8%	9.0%	6.8%	5.3%
19	Resources needed to meet 7.0% Reserve (W/DR & Interruptibles)	0	0	36	402
20	Surplus Resources Above 7.0% Reserve (W/DR & Interruptibles)	2,088	457	0	0
21	Existing Aging Generation Without Capacity Contracts <sup>9</sup>	-2,070	-2,070	-2,070	-2,070
1 5	tall and the second of the sec				

<sup>&</sup>lt;sup>1</sup> Dependable capacity by station includes 1,080 MW of stations located south of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: **DC imports 2,000 MW, SW imports 4,100 MW,** Imports from NP26 3,000 MW, LADWP Control Area imports 1,000 MW. Imports with own reserves highlighted in bold.

<sup>&</sup>lt;sup>3</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs because reserve margins are in excess of 5% (Stage 2).

<sup>&</sup>lt;sup>7</sup> Operating Reserve calculation ((Operating Generation-**Imports with Reserves**)/(Demand-**Imports with Reserves**))-1. See Footnote 2.

<sup>&</sup>lt;sup>8</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental
 Concerns of Aging Power Plant Operations and Retirements

#### Statewide (6/29/06 Revised Demand) Staff Draft 5 Year Outlook

Res	source Adequacy Planning Conventions	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	<u>2010</u>
1	Existing Generation <sup>1</sup>	56,697	57,977	57,977	58,145	58,145
2	Retirements (Known)	-1,539	0	-584	0	0
3	High Probability CA Additions	2,819	0	752	0	0
4	Net Interchange <sup>2</sup>	13,118	13,118	13,118	13,118	13,118
5	Total Net Generation (MW)	71,095	71,095	71,263	71,263	71,263
6	1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	59,498	60,350	61,216	62,098	62,995
7	Demand Response (DR)	524	524	524	524	524
8	Interruptible/Curtailable Programs	1,603	1,603	1,603	1,603	1,603
9	Planning Reserve <sup>4</sup>	23.1%	21.3%	19.9%	18.2%	16.5%
Exp	ected Operating Conditions					
	Total Net Generation (MW) (Line 5)	71,095	71,095	71,263	71,263	71,263
10	Outages (Average forced + planned)	-2,695	-2,695	-2,695	-2,695	-2,695
11	Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150	-150
12	Expected Operating Generation with Outages/Limitations <sup>6</sup>	68,250	68,250	68,418	68,418	68,418
13	Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	18.5%	16.4%	14.7%	12.6%	10.7%
Adv	verse Conditions					
14	High Zonal Transmission Limitation	-250	-250	-250	-250	-250
15	High Forced Outages	-1,160	-1,160	-1,160	-1,160	-1,160
16	Adverse Temperature Impact (1-in-10)	-3,591	-3,642	-3,695	-3,748	-3,802
17	Adverse Scenario Reserve Margin <sup>7</sup>	7.4%	5.5%	4.0%	2.2%	0.4%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	11.5%	9.6%	8.0%	6.1%	4.3%
19	Resources needed to meet adverse 7.0% reserve (W/DR & Interruptibles)	0	0	0	472	1,490
20	Resources needed to meet adverse 5.0% reserve (W/DR & Interruptibles)	0	0	0	0	396
21	Resources needed to meet adverse 1.5% reserve (W/DR & Interruptibles)	0	0	0	0	0
22	Existing Generation Without Capacity Contracts <sup>9</sup>	-3,088	-4,028	-7,943	-7,943	-7,943

Dependable capacity by station includes 1,080 MW of stations located South of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: DC imports 2,000 MW, SW imports 4,100 MW, NW imports (COI) 4,000 MW, LADWP Control Area imports 2,834 MW, IID Imports 184 MW. Imports with reserves 12,118 MW.

Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs due to Reserve Margins in excess of 5% (Stage 2).

Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 2.

Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental
 Concerns of Aging Power Plant Operations and Retirements

#### CA ISO (6/29/06 Revised Demand) Staff Draft 5 Year Outlook

Resource Adequacy Planning Conventions	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
1 Existing Generation <sup>1</sup>	45,791	46,265	46,265	46,265	46,265
2 Retirements (Known)	-1,539				
3 High Probability CA Additions	2,013				
4 Net Interchange <sup>2</sup>	10,650	10,600	10,700	10,650	10,600
5 Total Net Generation (MW)	56,915	56,865	56,965	56,915	56,865
6 1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	47,564	48,294	49,033	49,783	50,548
7 Demand Response (DR)	524	524	524	524	524
8 Interruptible/Curtailable Programs	1,403	1,403	1,403	1,403	1,403
9 Planning Reserve <sup>4</sup>	23.7%	21.7%	20.1%	18.2%	16.3%
Expected Operating Conditions					
Total Net Generation (MW) (Line 5)	56,915	56,865	56,965	56,915	56,865
10 Outages (Average forced + planned)	-2,255	-2,255	-2,255	-2,255	-2,255
11 Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150	-150
12 Expected Operating Generation with Outages/Limitations <sup>6</sup>	54,510	54,460	54,560	54,510	54,460
13 Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	17.7%	15.5%	13.6%	11.4%	9.3%
Adverse Conditions					
14 High Zonal Transmission Limitation	-250	-250	-250	-250	-250
15 High Forced Outages	-1,060	-1060	-1060	-1060	-1060
16 Adverse Temperature Impact (1-in-10)	-2,737	-2,779	-2,822	-2,865	-2,909
17 Adverse Scenario Reserve Margin <sup>7</sup>	6.9%	4.9%	3.2%	1.2%	-0.7%
18 Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	11.5%	9.4%	7.6%	5.6%	3.6%
19 Resources needed to meet adverse 7.0% reserve (W/DR & Interruptibles)	0	0	0	618	1,534
20 Resources needed to meet adverse 5.0% reserve (W/DR & Interruptibles)	0	0	0	0	633
21 Resources needed to meet adverse 1.5% reserve (W/DR & Interruptibles)	0	0	0	0	0
21 Existing Generation Without Capacity Contracts <sup>9</sup>	-3,088	-4,028	-7,943	-7,943	-7,943
1					

Dependable capacity by station includes 1,080 MW of stations located South of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: **DC imports 2,000 MW, SW imports 4,100 MW, NW imports (COI) 4,000 MW, TID/MID -450MW,** LADWP Control Area imports 1,000 MW. **Imports with own reserves highlighted in bold.** 

<sup>&</sup>lt;sup>3</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs due to Reserve Margins in excess of 5% (Stage 2).

<sup>&</sup>lt;sup>7</sup> Operating Reserve calculation ((Operating Generation-**Imports with Reserves**)/(Demand-**Imports with Reserves**))-1. See Footnote 2.

<sup>&</sup>lt;sup>8</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental Concerns of Aging Power Plant Operations and Retirements

### CA ISO NP26 (6/29/06 Revised Demand) Staff Draft 5 Year Outlook

Res	ource Adequacy Planning Conventions	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u> 2009</u>	<u>2010</u>
1	Existing Generation	24470	24417	24417	24417	24417
2	Retirements (Known)	-219				
3	High Probability CA Additions	166				
4	Net Interchange <sup>1</sup>	550	650	600	550	500
5	Total Net Generation (MW)	24,967	25,067	25,017	24,967	24,917
6	1-in-2 Summer Temperature Demand (Average) <sup>2</sup>	20,769	21,098	21,431	21,768	22,113
7	Demand Response (DR)	322	322	322	322	322
8	Interruptible/Curtailable Programs	316	316	316	316	316
9	Planning Reserve <sup>3</sup>	23.3%	21.8%	19.7%	17.6%	15.6%
Exp	ected Operating Conditions					
10	Outages (Average forced + planned)	-1,100	-1,100	-1,100	-1,100	-1,100
11	Zonal Transmission Limitation <sup>4</sup>	0	0	0	0	0
12	Expected Operating Generation with Outages/Limitations <sup>5</sup>	23,867	23,967	23,917	23,867	23,817
13	Expected Operating Reserve Margin (1-in-2) <sup>6</sup>	15.3%	14.0%	11.9%	9.9%	7.9%
Adv	erse Conditions					
14	High Zonal Transmission Limitation	0	0	0	0	0
15	High Forced Outages	-500	-500	-500	-500	-500
16	Adverse Temperature Impact (1-in-10)	-647	-657	-667	-678	-688
17	Adverse Scenario Reserve Margin <sup>7</sup>	9.4%	8.1%	6.1%	4.2%	2.3%
18	Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	12.4%	11.1%	9.1%	7.1%	5.2%
19	Resources needed to meet adverse 7.0% reserve (W/DR & Interruptibles)	0	0	0	0	404
20	Resources needed to meet adverse 5.0% reserve (W/DR & Interruptibles)	0	0	0	0	0
21	Resources needed to meet adverse 1.5% reserve (W/DR & Interruptibles)	0	0	0	0	0
22	Existing Generation Without Capacity Contracts <sup>8</sup>	-1,018	-1,018	-2,663	-2,663	-2,663

<sup>&</sup>lt;sup>1</sup> 2006 estimate of the following Net Imports: NW imports (COI) 4,000 MW minus exports to SP26 3,000 MW and TID/MID 450MW.

<sup>&</sup>lt;sup>2</sup> Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings

<sup>&</sup>lt;sup>3</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>&</sup>lt;sup>4</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>5</sup> Does not include Demand Response/Interruptible Programs due to reserve margins in excess of 5% (Stage 2).

Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 1.

<sup>&</sup>lt;sup>7</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 6.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental Concerns of Aging Power Plant Operations and Retirements

#### CA ISO SP26 (6/29/06 Revised Demand) Staff Draft 5 Year Outlook

Resource Adequacy Planning Conventions	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
1 Existing Generation <sup>1</sup>	21321	21848	21848	21848	21848
2 Retirements (Known)	-1,320				
3 High Probability CA Additions	1,847				
4 Net Import	10,100	10,100	10,100	10,100	10,100
5 Total Net Generation (MW)	31,948	31,948	31,948	31,948	31,948
6 1-in-2 Summer Temperature Demand (Average) <sup>3</sup>	27,960	28,375	28,796	29,223	29,657
7 Demand Response (DR)	202	202	202	202	202
8 Interruptible/Curtailable Programs	1,087	1,087	1,087	1,087	1,087
9 Planning Reserve <sup>4</sup>	18.9%	17.1%	15.4%	13.7%	12.1%
Expected Operating Conditions					
10 Outages (Average forced + planned)	-1,155	-1,155	-1,155	-1,155	-1,155
11 Zonal Transmission Limitation <sup>5</sup>	-150	-150	-150	-150	-150
12 Expected Operating Generation with Outages/Limitations <sup>6</sup>	30,643	30,643	30,643	30,643	30,643
13 Expected Operating Reserve Margin (1-in-2) <sup>7</sup>	12.3%	10.2%	8.1%	6.1%	4.2%
Adverse Conditions					
14 High Zonal Transmission Limitation	-250	-250	-250	-250	-250
15 High Forced Outages	-560	-560	-560	-560	-560
16 Adverse Temperature Impact (1-in-10)	-1,901	-1,929	-1,958	-1,987	-2,017
17 Adverse Scenario Reserve Margin <sup>7</sup>	-0.1%	-1.9%	-3.7%	<b>-</b> 5.5%	-7.2%
18 Adverse Scenario Reserve Margin w/DR and Interruptibles <sup>8</sup>	5.3%	3.4%	1.5%	-0.4%	-2.2%
19 Resources needed to meet adverse 7.0% reserve (W/DR & Interruptibles)	402	876	1,358	1,846	2,342
20 Resources needed to meet adverse 5.0% reserve (W/DR & Interruptibles)	0	392	865	1,344	1,831
21 Resources needed to meet adverse 1.5% reserve (W/DR & Interruptibles)	0	0	2	465	936
22 Existing Generation Without Capacity Contracts (Information Only) <sup>9</sup>	-2,070	-3,010	-5,280	-5,280	-5,280

Dependable capacity by station includes 1,080 MW of stations located South of Miguel.

<sup>&</sup>lt;sup>2</sup> 2006 estimate of the following Net Imports: **DC imports 2,000 MW, SW imports 4,100 MW,** Imports from NP26 3,000 MW, LADWP Control Area imports 1,000 MW. Imports with own reserves highlighted in bold.

Based on preliminary 2007 Demand Forecast for Resource Adequacy Proceedings.

<sup>&</sup>lt;sup>4</sup> Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.

<sup>5</sup> Based on CA ISO data.

<sup>&</sup>lt;sup>6</sup> Does not include Demand Response/Interruptible Programs due to Reserve Margins in excess of 5% (Stage 2).

<sup>&</sup>lt;sup>7</sup> Operating Reserve calculation ((Operating Generation-**Imports with Reserves**)/(Demand-**Imports with Reserves**))-1. See Footnote 2.

<sup>&</sup>lt;sup>8</sup> Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Capacity is included in Line 1 and represents plants identified in 2004 CEC Staff Draft Report 100-04-005D Resource, Reliability and Environmental
 Concerns of Aging Power Plant Operations and Retirements